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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NORMAN, MARC E

ART UNIT

PAPER NUMBER

3744

DATE MAILED: 11/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/785,023

Applicant(s)

RESTIVO ET AL.

Examiner

Marc E. Norman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2005.
2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,2,4-12 and 14-20 is/are rejected.
7) ☒ Claim(s) 3 and 13 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/9/04; 1/5/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 10-12, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Bowder.

As per claims 1, 10, and 11, Bowder discloses a temperature control valve comprising a control valve comprising valve seat 42, ball valve 22, bimetallic disk 26, inlet 16, and outlet 18, wherein the valve is opened and closed according to the bimetallic disk in response to predetermined temperatures to either allow or block liquid flow. (While Bowder does not specifically discuss the valve being used for freeze protection, the Examiner notes that this is simply an intended use recited in Applicant's preamble and, as such, is not accorded patentable weight, since Bowder discloses all the relevant structure/control processes. Further, as taught by Kolze, freeze protection valves are common and well known in the art.)

As per claims 2 and 12, Bowder discloses passage 37.

As per claim 14, Bowder discloses threaded connectors 31 and 32.

Claim Rejections - 35 USC § 103

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 4, 8, 9, 15, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowder in view of Kolze.

As per claims 4 and 15, Bowder does not teach the control valve being connected to a drain pipe. However, applying temperature protection valves to drain pipes is old and well known in the art as taught by Kolze (see for example freeze drain outlet B of Figure 1) It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the valve of in conjunction with a drain pipe in the manner done by Kolze for the similar purpose of protecting against pipe freezing.

As per claims 8, 9, 19, and 20, while Bowder does not specify the temperatures that trigger the valve, the basic valving technique is clearly applicable over a broad range of temperature applications, the prevention of freezing simply being one of them as discussed above. Kolze teaches a freeze protection valve which is actuated at around 45°F (column 7, lines

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39-42). Accordingly, the temperatures claimed are simply particular temperature applications of the basic valving function which would have been obvious to one of ordinary skill in the arts as temperatures that provide a level of temperature safety above the freezing point of water.

Claims 5-7 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bowder in view of Sordello.

As per claims 5, 6, 16, and 17, Bowder does not teach hot and cold flow lines connected to a manifold. However, such manifold arrangements in conjunction with freeze drains are common and well-known in the art as illustrated by Sordello (see for example Abstract, lines 10-13; column 1, lines 23-27 and 39-42) for example in Figure 1 of O'Hara et al.). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the valve of Bowder to such a manifold arrangement for the similar purpose of helping to prevent freezing.

As per claims 7 and 18, official notice is taken that sleeve connections are old and well-known in the art and, as such, would have been an obvious design choice for connecting the water supplies to the manifold of Sordello.

Allowable Subject Matter

Claims 3 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc E. Norman whose telephone number is 571-272-4812. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MN



MARC NORMAN
PRIMARY EXAMINER